Application No.: 10/601,102 Docket No.: 064422-5007US

## AMENDMENTS TO THE CLAIMS

1. (Currently amended) A fiber, wherein said fiber is produced by electrospinning and comprises at least one mesoporous molecular sieve, wherein the mesoporous molecular sieve is synthesized from a mesoporous precursor material, and said mesoporous precursor material is formed into a gel by combining a metal oxide and a surfactant.

- 2. (Canceled).
- 3. (Canceled)
- 4. (Currently amended) The fiber of claim 1, wherein said fiber comprises a metal oxide is selected from the group consisting of silicon dioxide, aluminum oxide, titanium dioxide, niobium oxide, tungsten oxide, tantalum oxide, vanadium pentoxide, indium tin oxide, calcium aluminate and mixtures thereof.
- 5. (Original) The fiber of claim 1, wherein said fiber has a diameter ranging from about 10 nanometers up to about 1,000 nanometers
- 6. (Currently amended) A network of fibers wherein, said network comprises fibers comprising at least one mesoporous molecular sieve, and further wherein, said fibers are produced by electrospinning, wherein the mesoporous molecular sieve is synthesized from a mesoporous precursor material, and said mesoporous precursor material is formed into a gel by combining a metal oxide and a surfactant.
- 7. (Canceled).
- 8. (Canceled)
- 9. (Currently amended) The fibers of claim 6, wherein said fibers comprise a metal oxide is selected from the group consisting of silicon dioxide, aluminum oxide, titanium dioxide, niobium oxide, tungsten oxide, tantalum oxide, vanadium pentoxide, indium tin oxide, calcium aluminate and mixtures thereof.

10-30. (Canceled)

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31. (Currently Amended) A method of making a network of fibers wherein, said network comprises fibers comprising at least one mesoporous molecular sieve, and further wherein, said fibers are produced by electrospinning comprising:

electrospinning a fiberizable material to form a network of fibers, wherein said fibers comprise at least one mesoporous molecular sieve, wherein the mesoporous molecular sieve is synthesized from a mesoporous precursor material, and said mesoporous precursor material is formed into a gel by combining a metal oxide and a surfactant.

- 32. (Canceled)
- 33. (Canceled)
- 34. (Currently amended) The method of claim 31, wherein said fibers comprise a metal oxide is selected from the group consisting of silicon dioxide, aluminum oxide, titanium dioxide, niobium oxide, tungsten oxide, tantalum oxide, vanadium pentoxide, indium tin oxide, calcium aluminate and mixtures thereof.